Amendment to the Claims

1. (Currently Amended) An energy management system for a power-generating device coupled to a grid, said power generating device having a working fluid intake, said energy management system comprising:

an electrical dissipation device coupled to said power-generating device, said power generating device further configured to direct power to said dissipation device in response to a transient condition presented to said power generating device, said transient condition comprising at least one of a transient load condition and a non-load related transient event; and

a dissipation device cooling system, said dissipation device cooling system configured to direct a portion of ~~a~~ said working fluid to said electrical dissipation device so as to provide thermal control to said electrical dissipation device.

2. (Original) The energy management system of claim 1, wherein said power-generating device is selected from the group consisting of hybrid fuel cells, steam turbines, microturbines and gas turbines.

3. (Original) The energy management system of claim 1, wherein said electrical dissipation device comprises a resistor.

4. (Original) The energy management system of claim 1, wherein said dissipation device cooling system comprises a valve.

5. (Original) An energy management system for a power-generating device comprising:

an electrical dissipation device coupled to said power-generating device, said power-generating device comprising a turbine generator;

a dissipation device cooling system coupled to said electrical dissipation device; and

a control system coupled to an output of said turbine generator and coupled to said dissipation device cooling system wherein said control system is configured to determine a condition of said turbine generator so as to direct said dissipation device cooling system to provide a portion of a working fluid, in response to said condition, to said electrical dissipation device for thermal control of said electrical dissipation device.

6. (Original) The energy management system of claim 5 wherein said dissipation device cooling system comprises a valve, said valve positioned to provide said portion of said working fluid across said electrical dissipation device.

7. (Original) The energy management system of claim 5 wherein said condition comprises a load condition.

8. (Original) The energy management system of claim 5 wherein said turbine generator is coupled to a turbine shaft.

9. (Original) The energy management system of claim 8 wherein said condition comprises a speed condition of said turbine shaft.

10. (Currently Amended) An energy management system for a gas turbine having a working fluid intake comprising:

a compressor;

a combustor coupled to said compressor;

a turbine generator coupled to said compressor;

a dissipation device cooling system, said dissipation device cooling system coupled to said compressor; and

an electrical dissipation device, said electrical dissipation device coupled to an electrical output of said turbine generator for receiving a current therein,

wherein said dissipation device cooling system is configured to direct a portion of ~~a~~ said working fluid to said electrical dissipation device so as to provide thermal control to said electrical dissipation device.

11. (Original) The energy management system of claim 10 wherein said dissipation device cooling system comprises a valve.

12. (Original) The energy management system of claim 10 further comprising a recuperator.

13. (Currently Amended) An energy management system for a steam turbine having a working fluid intake comprising:

a steam-generating device;

a turbine generator coupled to said steam-generating device, and said turbine generator coupled to a grid;

a dissipation device cooling system, said dissipation device cooling system coupled to said steam-generating device; and

an electrical dissipation device, said electrical dissipation device coupled to an electrical output of said turbine generator for receiving a current therein, said turbine generator further configured to direct power to said dissipation device in response to a transient condition presented to said turbine generator, said transient condition comprising at least one of a transient load condition and a non-load related transient event,

wherein said dissipation device cooling system is configured to direct a portion of ~~a~~ said working fluid to said electrical dissipation device so as to provide thermal control to said electrical dissipation device.

14. (Original) The energy management system of claim 13 wherein said dissipation device cooling system comprises a valve.

15. (Original) The energy management system of claim 13 wherein said steam-generating device is selected from the group consisting of a boilers and heat recovery steam generators.

16. (Currently Amended) An energy management system for a hybrid fuel cell having a working fluid intake comprising:

a compressor;

~~a~~ said hybrid fuel cell coupled to said compressor;

a turbine generator coupled to said compressor;

a dissipation device cooling system, said dissipation device cooling system coupled to said compressor; and

an electrical dissipation device, said electrical dissipation device coupled to an electrical output of said turbine generator for receiving a current therein,

wherein said dissipation device cooling system is configured to direct a portion of ~~a~~ said working fluid to said electrical dissipation device so as to provide thermal control to said electrical dissipation device.

17. (Original) The energy management system of claim 16 wherein said dissipation device cooling system comprises a valve.

18. (Original) The energy management system of claim 16 wherein said hybrid fuel cell comprises a solid oxide fuel cell.

19. (Currently Amended) A method of controlling a power-generating output of a power generating device comprising:

providing an electrical dissipation device coupled to said power generating device, said power generating device further configured to direct power to said dissipation device in response to a transient condition presented to said power generating device, said transient condition comprising at least one of a transient load condition and a non-load related transient event;

providing a dissipation device cooling system; and

opening said dissipation device cooling system to direct a portion of a working fluid to said electrical dissipation device so as to provide thermal control to said electrical dissipation device.

20. (Original) The method of claim 19 wherein said dissipation device cooling system is positioned to dispose a fluid flow path across said electrical dissipation device when a current flows through said electrical dissipation device.

21. (Currently Amended) The method of claim 19 further comprising providing a control system coupled to an output of a turbine generator and coupled to said dissipation device cooling system wherein said control system determines a load condition in said turbine generator so as to direct said dissipation device cooling system to provide a portion of ~~a~~ said working fluid to said electrical dissipation device for thermal control of said electrical dissipation device.

22. (Currently Amended) The method of claim 19 further comprising providing a control system coupled to an output of a turbine shaft and coupled to said dissipation device cooling system wherein said control system determines a speed condition in said turbine shaft so as to direct said dissipation device cooling system to provide a portion of ~~a~~ said working fluid to said electrical dissipation device for thermal control of said electrical dissipation device.